

REMARKS

These remarks are in response to the Office Action dated December 27, 2006, which has a shortened statutory period for response set to expire March 27, 2007. A three-month extension, to expire June 27, 2007, is requested in a petition filed herewith.

Information Disclosure Statement

The Examiner indicates that the information disclosure statement (IDS) filed 07 August 1998 failed to comply with 37 CFR 1.98(a)(2). The Examiner indicates that copies of the non-patent literature could not be located and were not, therefore, considered.

It appears to Applicants, based on the Examiner's initials appearing on Form PTO-1449, that all of the cited U.S. patent documents have been considered by the Examiner. Therefore, Applicants are submitting a new IDS herewith reciting the non-patent documents, but not reciting the already considered U.S. patent documents. The statutory fee for the new IDS submissions is included.

Title

The title is amended in response to the Examiner's objection. Should the Examiner disapprove of the amended title, the Examiner is invited to suggest an acceptable title.

Drawings

The Examiner requires new corrected drawings. The Examiner writes:

New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because the drawings contain handwritten identifiers that, at times, are hard to distinguish.

As required by the Examiner, a complete new set of drawings is filed herewith. No new matter is entered.

Applicants respectfully request withdrawal of the objection to the drawings.

Claims

Claims 1-44 are pending in the above-identified application. Claims 13-26 and 31-44 are withdrawn from consideration by the Examiner pursuant to a restriction requirement. Claims 1-12 and 27-30 are rejected over prior art. Claims 1, 3, 8, 10, and 27 are amended. Claims 13-26 and 31-44 are canceled, and Claims 45-76 are added. Claims 2, 4, 5-7, 9, 11-12, and 28-30 remain as filed. Reconsideration is requested.

Rejections Under 35 U.S.C. § 112

Claims 1-12 and 27-30 are rejected under 35 U.S.C. § 112, second paragraph. The Examiner writes:

Claims 1-12 and 27-30 recite the limitation “said central processing unit.” There is insufficient antecedent basis for this limitation in the claim. A central processing unit has not been established in the claim.

The relevant claims are amended to change each occurrence of “said central processing unit” to “said microprocessing unit.” Antecedent basis for “said microprocessing unit” is provided in lines 1-2 of independent Claims 1, 8, and 27.

For the above reasons Applicants request reconsideration and withdrawal of the rejections under 35 U.S.C. § 112.

Rejections Under 35 U.S.C. § 102

Claims 1-2, 4-12, and 27-30 are rejected under 35 U.S.C. § 102 (b) as being taught by Briggs et al. (U.S. Patent Nos. 4,649,471 and 4,626,985).

The claims are amended herein to overcome the rejections. The amendment of the claims is intended to expedite allowance of this application and is not an admission with respect to the propriety of the rejections.

Claims 1-7:

As amended herein, Claim 1 recites (in part): “wherein said microprocessing unit further comprises an arithmetic logic unit that is used for data operations and for branch address calculations.” The cited prior art does not disclose this limitation in combination with the other elements of Claim 1. Therefore, Claim 1 is not anticipated. Claims 2-7 depend, either directly or indirectly, from Claim 1 and are, therefore, distinguished over the prior art for at least the same reasons as Claim 1.

Claims 8-12:

As amended herein, Claim 8 recites (in part): “wherein said microprocessing unit fetches multiple sequential instructions from memory in parallel, and said memory supplies said multiple sequential instructions to said microprocessing unit during a single memory cycle.” The cited prior art does not disclose this limitation in combination with the other elements of Claim 8. Therefore, Claim 8 is not anticipated. Claims 9-12 depend, either directly or indirectly, from Claim 8 and are, therefore, distinguished over the prior art for at least the same reasons as Claim 8.

Claims 27-30:

As amended herein, Claim 27 recites (in part): “wherein bus transaction requests are arbitrated and prioritized by said memory interface unit.” The cited prior art does not disclose this limitation in combination with the other elements of Claim 27. Therefore, Claim 27 is not anticipated. Claims 28-30 depend, either directly or indirectly, from Claim 27 and are, therefore, distinguished over the prior art for at least the same reasons as Claim 27.

For the above reasons Applicants request reconsideration and withdrawal of the rejections under 35 U.S.C. § 102.

Rejections Under 35 U.S.C. § 103

Claim 3 are rejected under 35 U.S.C. § 103 as being unpatentable over Briggs et al. in view of Niehaus et al. (U.S. Patent No. 4,835,738).

In order to establish a prima facie case of obviousness, the prior art reference (or references when combined) must teach or suggest all of the claim limitations. M.P.E.P. §2143.

Applicants respectfully assert that the current amendments to Claim 1 obviate the obviousness rejection of Claim 3, which depends from Claim 1. In particular, for at least the reasons set forth above, the cited references when combined do not disclose the newly added limitations of Claim 1, which are included in dependent Claim 3. Therefore, no prima facie case of obviousness is established with respect to Claim 3.

For the above reasons Applicants request reconsideration and withdrawal of the rejections under 35 U.S.C. § 103.

New Claims 45-76

New independent Claim 45 and dependent Claims 46-62 claim features of a microprocessor system that together provide increased efficiency and speed. Claims 63-76 also claim aspects of the sharing of architectural resources in order to obtain increased efficiency and speed. The cited prior art does not disclose the claimed features.

For the foregoing reasons, Applicants believe Claims 1-12, 27-30, and 45-76 are in condition for allowance. Should the Examiner undertake any action other than allowance of Claims 1-12, 27-30, and 45-76, or if the Examiner has any questions or suggestions for expediting the prosecution of this application, the Examiner is requested to contact Applicants' attorney at (269) 279-8820.

Respectfully submitted,

Date: 6/27/07


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CERTIFICATE OF MAILING (37 CFR 1.8(A))

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Date: 6/27/07

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